Amendments to the Specification:

Please replace paragraph beginning on page 5, line 16 and ending on page 5, line 18 with the following amended paragraph:

Another object of this invention is a recombinant protein, ~~encoding~~ encoded by a portion of the flaA flagellin gene of *Campylobacter coli* VC167 ~~encoded by~~ consisting essentially of nucleotides 1-999 ~~13-1,015~~ of SEQ ID NO.: 1 and corresponding to amino acid residues 1-333 of the amino acid sequence of SEQ ID NO: 2. ~~5-338~~.

Please replace paragraph beginning on page 19, line 20 and ending on page 21, line 11 with the following amended paragraph:

Flagella are a key virulence determinant of *Campylobacter* spp. since motility is essential for establishment of colonization in the mucus[[ ]]lining of the gastrointestinal tract (25, 26, 27, 28). Moreover, flagellin is an immunodominant antigen recognized during infection (16, 17,11,18), and it has been suggested that development of antibodies against flagellin correlates with development of protection (29, 11, 18). The observation that feeding of one strain of campylobacter protects against disease from the homologous, but not heterologous strains, (10) is consistent with the idea that the major protective antigen shows variation among strains. Although there is no flagellar serotyping scheme for campylobacters comparable to the H antigen typing scheme of the *Enterobacteriaceae*, there is serological diversity among campylobacter flagellins (34, 35, 7). In *Salmonella* and *E. coli* it has been demonstrated that the amino and carboxy ends of flagellins are involved in transport of the monomer and assembly into the filament, and these regions are highly conserved among serotypes. The central region of

the flagellin protein, which lacks functional constraints, is the antigenically diverse region responsible for H serospecificity, and is also the region which is surface exposed in the flagellar filament. Based on comparison of DNA sequence analyses of flagellin genes from several strains of *C. jejuni*, including that of 81-176 reported here, and one strain of *C. coli* (4,30, 8, 3, 18, 32), the overall structure of campylobacter flagellins appears similar to those of the enterics. Thus, the amino and carboxy terminal regions are highly conserved among campylobacter flagellins, and the central regions are more variable (36). Moreover, Power et al. (7) have shown that antibodies to the amino and carboxy regions are not surface exposed in the flagella filament of campylobacter. The only antibodies found in that study to be surface exposed in the filament were those which recognize a glycosyl posttranslational modification (33, 37, 38). These modifications alter the apparent M_r of flagellins on SDS-PAGE gels. For example, the masses of the flagellins of VC167 and 81-176 are predicted to differ by only 207, but their apparent difference on SDS-PAGE is greater (see Fig. 1). Moreover, Alm et al. (39) showed that the apparent M_r of flagellin can vary when expressed in different *campylobacter* hosts. The presence of a carbohydrate moiety on a bacterial flagellin is highly unusual and has been shown to confer serospecificity to the flagellin (33). Thus, antisera which recognize the posttranslational modifications on the flagellar filament of VC167 (Lior 8) also react with flagellins of other strains of Lior 8, but not strains of other Lior serogroups (39). Although flagellin is not the serodeterminant of Lior 8 (i.e. non-flagellated mutants of Lior 8 strains still serotype), flagellins appear to be conserved antigenically within the serogroup. Moreover, more recent studies have suggested that

glyc syl modifications on flagellin, as well as other campylobacter proteins, are immunodominant (38).